WHAT IS CLAIMED IS:

1. A magnetic actuator comprising:

a permanent magnet;

a pivotally movable member located at an oblique magnetic field position offset in a direction parallel to a top surface of the permanent magnet by a predetermined horizontal distance from the center of said permanent magnet and spaced a predetermined vertical distance upwardly from the top surface of the permanent magnet within a magnetic field generated by said permanent magnet;

torsion hinge means pivotally movably supporting said pivotally movable member at its one end portion adjacent the center of said permanent magnet;

a movable member; and

drive means for driving said movable member;

wherein

said movable member is driven from a direction orthogonal to a pivot axis defined by said torsion hinge means towards the torsion hinge means by said drive means to be brought in a space between said permanent magnet and said pivotally movable member; and

said pivotally movable member and said movable member are ferromagnetic;

whereby said pivotally movable member is caused to pivot by a repulsive force produced between the pivotally movable member and said movable member as the movable member is driven to move nearer to said pivotally movable member.

2. The magnetic actuator set forth in claim 1 wherein each of said pivotally movable member and said movable member comprises a substrate and a ferromagnetic film formed on the surface of the substrate.

3. The magnetic actuator set forth in claim 2 wherein said ferromagnetic film is formed in the form of a frame on the surface of the substrate.

4. The magnetic actuator set forth in claim 3 wherein said ferromagnetic film in the form of a frame has its frame interrupted at one place.

5. The magnetic actuator set forth in claim 1 wherein said drive means is an electrostatic actuator comprising movable comb electrode means and fixed comb electrode means disposed opposite to each other.